



## SEQUENCE LISTING

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1st. submitted 5/20/03Am  
7/29/03

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The Regents of the University of California

<120> Nucleic Acids That Control Seed and Fruit  
Development in Plants

<130> 023070-086120US

<140> 09/177,249

<141> 1998-10-22

<150> US 09/071,838

<151> 1998-05-01

<160> 324

<170> PatentIn Ver. 2.0

<210> 1

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<212> DNA

<213> Arabidopsis sp.

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<222> (43)...(2112)

<223> fertilization-independent endosperm 1 (FIE1) cDNA

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Lys Glu Gln Ile Glu Lys Glu Arg Phe Leu His Ile Lys Arg Lys Phe  
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Glu Asp Gln Asp Tyr Ala Leu Glu Glu Asp Val Pro Leu Phe Leu Asp	
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gaa gat gta cca tta tta cca agt gtc aag ctt cca att gtt gag aag	438
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Cys Tyr Leu Lys Val Arg Ser Val Thr Glu Ala Asp His Val Met Asp	
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Cys Thr Met Ser Leu Asp Leu Asn Lys Thr Thr Gln Arg His Asn Gln	
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Thr Ser Gly Glu Ala Lys Phe Tyr Lys His Tyr Thr Pro Cys Thr Cys	
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 Arg Ser Cys Pro Leu Ser Cys Gly Asp Gly Thr Leu Gly Glu Thr Pro  
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 Trp Asp Ser Leu Lys Lys Asn Glu Tyr Leu Gly Glu Tyr Thr Gly Glu  
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 580 585 590  
 Ile Gly Ser Ser Tyr Leu Phe Thr Leu Asn Asp Gln Leu Glu Ile Asp  
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 Ala Arg Arg Lys Gly Asn Glu Phe Lys Phe Leu Asn His Ser Ala Arg  
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Pro Asn Cys Tyr Ala Lys Leu Met Ile Val Arg Gly Asp Gln Arg Ile  
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Gly Leu Phe Ala Glu Arg Ala Ile Glu Glu Gly Glu Glu Leu Phe Phe  
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Val Gly Ser Leu Thr Pro Ser Asn Lys Lys Ser Tyr Lys Val Thr Asn  
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att act ctg tac aat tgt ctc gga gat ggt gcc ata tca gca ttg caa 423  
Ile Thr Leu Tyr Asn Cys Leu Gly Asp Gly Ala Ile Ser Ala Leu Gln  
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Ser Tyr Ala Asp Glu Asp Lys Glu Glu Ser Phe Tyr Thr Val Ser Trp  
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 Tyr Val Trp Asp Leu Lys Ser Cys Pro Pro Val Leu Ile Thr Lys Leu  
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 Trp Asp Val Ile Thr Lys  
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Phe Asp Val Phe Val Thr Ala Gly Gly Asn Arg Ile Thr Leu Tyr Asn  
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Cys Leu Gly Asp Gly Ala Ile Ser Ala Leu Gln Ser Tyr Ala Asp Glu  
 65 70 75 80

Asp Lys Glu Glu Ser Phe Tyr Thr Val Ser Trp Ala Cys Gly Val Asn  
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Gly Asn Pro Tyr Val Ala Ala Gly Gly Val Lys Gly Ile Ile Arg Val  
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Ile Asp Val Asn Ser Glu Thr Ile His Lys Ser Leu Val Gly His Gly  
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 WD40/polycomb gene genomic sequence

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SET/polycomb gene genomic sequence reading frame 1

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Val	Trp	Thr	Cys	Phe	Tyr	Asn	Leu	Met	Tyr	Ser	Val	Asp	Gln	Lys	Ile	
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Val Lys Pro Val Val Asp Asn Thr Ile Tyr Gly Val Tyr Val Glu Glu	
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Arg Trp Ser Glu Arg Ala Val Val Ala Val Thr Phe Gly Ile Met Trp	
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Trp Trp Arg Leu Arg Asp Glu Val Glu Ser Leu Val Val Val Val Thr	
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Tyr Ile Phe Ile Thr His Pro Phe Glu Lys Leu Gly Asp Leu Ile	
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Ala Tyr Asn Ile Tyr Glu Leu Asn Asn Ile Ala Ile Tyr Ile Phe	
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His Tyr Lys Ser Tyr Arg Thr Leu Gln Asn Val Tyr Ile Asp Leu	
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Ser Arg Leu Phe Phe Tyr Asn Ile Val Tyr Glu Phe Lys Leu Glu	
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610 615 620	
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625 630 635 640	
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Lys Gln Ala Ser Pro Asn Thr Phe Leu Pro Asp Tyr Asn Phe Pro	
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aaa gat aca atg aac tca agc tta aga atg atg gaa ctg ctg gtg agg Lys Asp Thr Met Asn Ser Ser Leu Arg Met Met Glu Leu Leu Val Arg 1265 1270 1275 1280	3840
ctt ctg att tga cat cca aga caa taa cta ctg ctt tcc agg att ttg Leu Leu Ile His Pro Arg Gln Leu Leu Leu Ser Arg Ile Leu 1285 1290 1295	3888
ctg ata gac gtc att gcc gtc gtt gca tgg taa ctt tga atc ttt ctt Leu Ile Asp Val Ile Ala Val Val Ala Trp Leu Ile Phe Leu 1300 1305 1310	3936
ttt taa ttt agc cac aaa aaa ggg aga tga tca tac atg ttt tta ttt Phe Phe Ser His Lys Lys Gly Arg Ser Tyr Met Phe Leu Phe 1315 1320 1325	3984
tat ttt atc att tgt ttt aca gat att cga ttg tca tat gca tga gaa Tyr Phe Ile Ile Cys Phe Thr Asp Ile Arg Leu Ser Tyr Ala Glu 1330 1335 1340	4032
gta tga gcc cga gtc tag atc cgt aag cat taa att cat tta aat tat Val Ala Arg Val Ile Arg Lys His Ile His Leu Asn Tyr 1345 1350 1355 1360	4080
ttt gtt agt ttc aca acc ctt ata tat aag gtt aag tga tta act taa Phe Val Ser Phe Thr Thr Leu Ile Tyr Lys Val Lys Leu Thr 1365 1370 1375	4128

tta gat tgc ttt ggc ttg tca gag cga aga caa atc tag ttt gtt tga	4176
Leu Asp Cys Phe Gly Leu Ser Glu Arg Arg Gln Ile Phe Val	
1380 1385 1390	
gga tga aga tag aca acc atg cag tga gca ttg tta cct caa ggt ctc	4224
Gly Arg Thr Thr Met Gln Ala Leu Leu Pro Gln Gly Leu	
1395 1400 1405	
tat ctc tct ccc tct ctc tct caa ttt ttt tgt cta ttc ctt aat tac	4272
Tyr Leu Ser Pro Ser Leu Ser Gln Phe Phe Cys Leu Phe Leu Asn Tyr	
1410 1415 1420	
gtt tat tag tta ctg gtt taa tat taa ata ggt gag gag tgt gac aga	4320
Val Tyr Leu Leu Val Tyr Ile Gly Glu Glu Cys Asp Arg	
1425 1430 1435 1440	
agc tga tca tgt gat gga taa tga taa ctc tat atc aaa caa gat tgt	4368
Ser Ser Cys Asp Gly Leu Tyr Ile Lys Gln Asp Cys	
1445 1450 1455	
ggc ctc aga tcc aaa caa cac tat gtg gac gcc tgt aga gaa gga tct	4416
Gly Leu Arg Ser Lys Gln His Tyr Val Asp Ala Cys Arg Glu Gly Ser	
1460 1465 1470	
tta ctt gaa agg aat tga gat att tgg gag aaa cag gta aaa aaa taa	4464
Leu Leu Glu Arg Asn Asp Ile Trp Glu Lys Gln Val Lys Lys	
1475 1480 1485	
aaa tag att taa tgc att aat ata tat act tac act gta ttc ctt gat	4512
Lys Ile Cys Ile Asn Ile Tyr Thr Tyr Thr Val Phe Leu Asp	
1490 1495 1500	
tat gct ggt tcg cag ttg tga tgt tgc att aaa cat act tcg ggg gct	4560
Tyr Ala Gly Ser Gln Leu Cys Cys Ile Lys His Thr Ser Gly Ala	
1505 1510 1515 1520	
taa gac gtg cct aga gat tta caa tta cat gcg cga aca aga tca atg	4608
Asp Val Pro Arg Asp Leu Gln Leu His Ala Arg Thr Arg Ser Met	
1525 1530 1535	
tac tat gtc att aga cct taa caa aac tac aca aag aca caa tca ggt	4656
Tyr Tyr Val Ile Arg Pro Gln Asn Tyr Thr Lys Thr Gln Ser Gly	
1540 1545 1550	
aca cta acc tat gtc gta att att ctc atg aca tgt atg tta aaa aca	4704
Thr Leu Thr Tyr Val Val Ile Ile Leu Met Thr Cys Met Leu Lys Thr	
1555 1560 1565	
cat gaa gtt tcc tat atg tgt tga tgg ttt tat cac agg tta cca aaa	4752
His Glu Val Ser Tyr Met Cys Trp Phe Tyr His Arg Leu Pro Lys	
1570 1575 1580	
aag tat ctc gaa aaa gta gta ggt cgg tcc gca aaa aat cga gac tcc	4800
Lys Tyr Leu Glu Lys Val Val Gly Arg Ser Ala Lys Asn Arg Asp Ser	
1585 1590 1595 1600	

gaa aat atg ctc gtt atc cgc ctg ctt taa aga aaa caa cta gtg gag	4848
Glu Asn Met Leu Val Ile Arg Leu Leu Arg Lys Gln Leu Val Glu	
1605 1610 1615	
aag cta agt ttt ata agc act aca cac cat gca ctt gca agt caa aat	4896
Lys Leu Ser Phe Ile Ser Thr Thr His His Ala Leu Ala Ser Gln Asn	
1620 1625 1630	
gtg gac agc aat gcc ctt gtt taa ctc acg aaa att gct gcg aga aat	4944
Val Asp Ser Asn Ala Leu Val Leu Thr Lys Ile Ala Ala Arg Asn	
1635 1640 1645	
att gcg ggt atg tca ttc aat ttt tcc taa gcc gga aga tcc atg aga	4992
Ile Ala Gly Met Ser Phe Asn Phe Ser Ala Gly Arg Ser Met Arg	
1650 1655 1660	
ttt aat ttg aac atg agt ttg tat ttt ttg ttc agg tgc tca aag gat	5040
Phe Asn Leu Asn Met Ser Leu Tyr Phe Leu Phe Arg Cys Ser Lys Asp	
1665 1670 1675 1680	
tgc aac aat cgc ttt gga gga tgt aat tgt gca att ggc caa tgc aca	5088
Cys Asn Asn Arg Phe Gly Gly Cys Asn Cys Ala Ile Gly Gln Cys Thr	
1685 1690 1695	
aat cga caa tgt cct tgt ttt gct gct aat cgt gaa tgc gat cca gat	5136
Asn Arg Gln Cys Pro Cys Phe Ala Ala Asn Arg Glu Cys Asp Pro Asp	
1700 1705 1710	
ctt tgt cgg agt tgt cct ctt agg taa cac ttt cac ttc aat atc tct	5184
Leu Cys Arg Ser Cys Pro Leu Arg His Phe His Phe Asn Ile Ser	
1715 1720 1725	
tta tac aaa ttc tat aat caa agt aat tca aac caa aag tct tat aaa	5232
Leu Tyr Lys Phe Tyr Asn Gln Ser Asn Ser Asn Gln Lys Ser Tyr Lys	
1730 1735 1740	
aaa aac ttt ata tat agc tgt gga gat ggc act ctt ggt gag aca cca	5280
Lys Asn Phe Ile Tyr Ser Cys Gly Asp Gly Thr Leu Gly Glu Thr Pro	
1745 1750 1755 1760	
gtg caa atc caa tgc aag aac atg caa ttc ctc ctt caa acc aat aaa	5328
Val Gln Ile Gln Cys Lys Asn Met Gln Phe Leu Leu Gln Thr Asn Lys	
1765 1770 1775	
aag gta atc aac gtc aaa tcc gta ccg aaa att taa aac taa tta tac	5376
Lys Val Ile Asn Val Lys Ser Val Pro Lys Ile Asn Leu Tyr	
1780 1785 1790	
gaa aga cat tta act atc att tcc cgt att tta cta gat tct cat tgg	5424
Glu Arg His Leu Thr Ile Ile Ser Arg Ile Leu Leu Asp Ser His Trp	
1795 1800 1805	
aaa gtc tga tgt tca tgg atg ggg tgc att tac atg ggt aag caa tca	5472
Lys Val Cys Ser Trp Met Gly Cys Ile Tyr Met Gly Lys Gln Ser	
1810 1815 1820	

tgt aaa tat aag aat aag ttt aat agt tat tgg tgc att cat aac act Cys Lys Tyr Lys Asn Lys Phe Asn Ser Tyr Trp Cys Ile His Asn Thr 1825                      1830                      1835                      1840	5520
ttt ttt ttt tta ata atg ttt tat act tta gac cat taa ata tat tgt Phe Phe Phe Leu Ile Met Phe Tyr Thr Leu Asp His            Ile Tyr Cys 1845                      1850                      1855	5568
gtg ata tgg ttt gac ccg tca gga ctc tct taa aaa gaa tga gta tct Val Ile Trp Phe Asp Pro Ser Gly Leu Ser            Lys Glu            Val Ser 1860                      1865                      1870	5616
cgg aga ata tac tgg aga act gat cac tca tga tga agc taa tga gcg Arg Arg Ile Tyr Trp Arg Thr Asp His Ser            Ser            Ala 1875                      1880                      1885	5664
tgg gag aat aga aga tcg gat tgg ttc ttc cta cct ctt tac ctt gaa Trp Glu Asn Arg Arg Ser Asp Trp Phe Phe Leu Pro Leu Tyr Leu Glu 1890                      1895                      1900	5712
tga tca ggt aac ttc aga ata att ttg aag taa cgt ttt aat cat tcg Ser Gly Asn Phe Arg Ile Ile Leu Lys            Arg Phe Asn His Ser 1905                      1910                      1915                      1920	5760
cgg gtt aca cat cta ttc gaa tca aag taa cat tta ttt tac agc tcg Arg Val Thr His Leu Phe Glu Ser Lys            His Leu Phe Tyr Ser Ser 1925                      1930                      1935	5808
aaa tcg atg ctc gcc gta aag gaa acg agt tca aat ttc tca atc act Lys Ser Met Leu Ala Val Lys Glu Thr Ser Ser Asn Phe Ser Ile Thr 1940                      1945                      1950	5856
cag caa gac cta act gct acg cca agg tac taa gcc gtt ata ctt tat Gln Gln Asp Leu Thr Ala Thr Pro Arg Tyr            Ala Val Ile Leu Tyr 1955                      1960                      1965	5904
ctt gaa caa ata cta aca tta tac aaa caa aaa tac tta tgt tag ttt Leu Glu Gln Ile Leu Thr Leu Tyr Lys Gln Lys Tyr Leu Cys            Phe 1970                      1975                      1980	5952
ctt tag tta aat cgt gta tca act tta ctc gtc gtt gat tgg ttt tca Leu            Leu Asn Arg Val Ser Thr Leu Leu Val Val Asp Trp Phe Ser 1985                      1990                      1995                      2000	6000
tat tga aga tat tcc aag aaa ctc aaa ctc att tta aat gat ttt ttc Tyr            Arg Tyr Ser Lys Lys Leu Lys Leu Ile Leu Asn Asp Phe Phe 2005                      2010                      2015	6048
ttg tcg aga aaa ttt agg tta cga aaa ttt atg gtt tcg tgt gca gtt Leu Ser Arg Lys Phe Arg Leu Arg Lys Phe Met Val Ser Cys Ala Val 2020                      2025                      2030	6096
gat gat tgt gag agg aga tca gag gat tgg tct att tgc gga gag agc Asp Asp Cys Glu Arg Arg Ser Glu Asp Trp Ser Ile Cys Gly Glu Ser 2035                      2040                      2045	6144

aat cga aga agg tga gga gct ttt ctt cga cta ctg cta tgg acc aga	6192
Asn Arg Arg Arg Gly Ala Phe Leu Arg Leu Leu Leu Trp Thr Arg	
2050 2055 2060	
aca tgc gga ttg gtc gcg tgg tcg aga acc tag aaa gac tgg tgc ttc	6240
Thr Cys Gly Leu Val Ala Trp Ser Arg Thr Lys Asp Trp Cys Phe	
2065 2070 2075 2080	
taa aag gtc taa gga agc ccg tcc agc tcg tta gtt ttt gat ctg agg	6288
Lys Val Gly Ser Pro Ser Ser Ser Leu Val Phe Asp Leu Arg	
2085 2090 2095	
aga agc agc aat tca agc agt cct ttt ttt atg tta tgg tat atc aat	6336
Arg Ser Ser Asn Ser Ser Ser Pro Phe Phe Met Leu Trp Tyr Ile Asn	
2100 2105 2110	
taa taa tgt aat gct att ttg tgt tac taa acc aaa act taa gtt tct	6384
Cys Asn Ala Ile Leu Cys Tyr Thr Lys Thr Val Ser	
2115 2120 2125	
gtt tta ttt gtt tta ggg tgt ttt gtt tgt atc ata tgt gtc tta act	6432
Val Leu Phe Val Leu Gly Cys Phe Val Cys Ile Ile Cys Val Leu Thr	
2130 2135 2140	
ttc aaa gtt ttc ttt ttg tat ttc aat tta aaa aca atg ttt atg ttg	6480
Phe Lys Val Phe Phe Leu Tyr Phe Asn Leu Lys Thr Met Phe Met Leu	
2145 2150 2155 2160	
tta gtt tgc ata gac ctt tgg aaa aaa gct ttg cac aac ttt aca	6528
Leu Val Cys Ile Asp Leu Trp Lys Lys Lys Ala Leu His Asn Phe Thr	
2165 2170 2175	
ttt att tag tct tca ttt agc gaa aaa tca cat aac aca agt ctg tgg	6576
Phe Ile Ser Ser Phe Ser Glu Lys Ser His Asn Thr Ser Leu Trp	
2180 2185 2190	
tac gta atg tac aaa aat gtc aaa ata atg ggt ttt atc att aaa aaa	6624
Tyr Val Met Tyr Lys Asn Val Lys Ile Met Gly Phe Ile Ile Lys Lys	
2195 2200 2205	
aaa tat tgg tta tga atg aag tat agt tag aat ttt agg tat tag ctc	6672
Lys Tyr Trp Leu Met Lys Tyr Ser Asn Phe Arg Tyr Leu	
2210 2215 2220	
gtt tgg ttt taa aac gtt ttt cga gat tta att ttg tag tct att gag	6720
Val Trp Phe Asn Val Phe Arg Asp Leu Ile Leu Ser Ile Glu	
2225 2230 2235 2240	
taa tac atg gaa gaa tca tca aca aag tgg ctg tag ctt acg aaa ggt	6768
Tyr Met Glu Glu Ser Ser Thr Lys Trp Leu Leu Thr Lys Gly	
2245 2250 2255	
ttt act tta atg taa ata tgt att tga tgc atc taa cat tta gta tct	6816
Phe Thr Leu Met Ile Cys Ile Cys Ile His Leu Val Ser	
2260 2265 2270	



25

aaa caa ata aaa aca aaa aaa aag aaa aaa gct ctt taa aat ccg aaa 6864  
 Lys Gln Ile Lys Thr Lys Lys Lys Lys Lys Ala Leu Asn Pro Lys  
 2275 2280 2285

gta act att ttc aaa aaa tct aaa tta taa act taa atg ttt gga atc 6912  
 Val Thr Ile Phe Lys Lys Ser Lys Leu Thr Met Phe Gly Ile  
 2290 2295 2300

gcg aac gac tat tgc taa ata taa atg cta aat ata cat gaa gat gtg 6960  
 Ala Asn Asp Tyr Cys Ile Met Leu Asn Ile His Glu Asp Val  
 2305 2310 2315 2320

aaa aac atg ttg gat ttg tgg aat cgt taa tga cca cgg tta aat ggc 7008  
 Lys Asn Met Leu Asp Leu Trp Asn Arg Pro Arg Leu Asn Gly  
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ggg atc c 7015  
 Gly Ile

<210> 7  
 <211> 34  
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<400> 7  
 Gly Ser Ile Ile Phe Lys Asn Gln Ile Phe Ser Tyr Leu Leu Phe Val  
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Ser Lys Lys Lys Lys Thr His Asp Asp Tyr Pro Ser Ala Gly Cys Val  
 20 25 30

His Arg

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 <212> PRT  
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<400> 8  
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 Val Trp Thr Cys Phe Tyr Asn Leu Met Tyr Ser Val Asp Gln Lys Ile  
 1 5 10 15

Glu Lys

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 <212> PRT  
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Asn Leu Cys Ser  
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<210> 13  
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 <212> PRT  
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 Ile Phe Leu Thr Ser Ser Val Pro Ser His Ser Arg Asn Ser Ile Ile  
           1                  5                  10                  15

Pro Phe Ser Phe Phe Phe Ser Val Phe Gln Ser Leu Arg Ile Lys Met  
                   20                  25                  30

Glu His Glu Glu Thr Gln Lys Asn Thr Arg Asn Ser Trp Ser Leu Ile  
           35                  40                  45

Arg Pro Phe Gln Met Ile Ser Ile Ser Phe Leu Ser Leu Leu Pro  
           50                  55                  60

Leu Ser Phe Leu Phe Leu Ser Arg Leu Ser Leu Tyr Thr Ser Ser Thr  
           65                  70                  75                  80

Pro Val Thr Val Ser Gly Val Ser Ser Val Ile His Gln Ala Asp Val  
                   85                  90                  95

Gly Val Leu Tyr Thr Ile Leu Phe Leu Ile Ile Val Phe Thr Leu Ile  
 100 105 110

His Ser Leu Ser Gly Lys Pro Glu Cys Ser Val Leu His Ser His Leu  
 115 120 125

Tyr Ile Cys Trp Ile Val Leu Phe Ile Ala Gln Ala Cys Ala Phe Gly  
 130 135 140

Ile Lys Arg Thr Met Ser Thr Thr Met Ser Ile Asn Pro Asp Lys Asn  
 145 150 155 160

Leu Phe Leu Ala Thr His Glu Arg Trp Met Leu Val Arg Val Leu Phe  
 165 170 175

Phe Leu Gly Leu His Glu Val Met Leu Met Trp Phe Arg Val Val Val  
 180 185 190

Lys Pro Val Val Asp Asn Thr Ile Tyr Gly Val Tyr Val Glu Glu Arg  
 195 200 205

Trp Ser Glu Arg Ala Val Val Ala Val Thr Phe Gly Ile Met Trp Trp  
 210 215 220

Trp Arg Leu Arg Asp Glu Val Glu Ser Leu Val Val Val Val Thr Ala  
 225 230 235 240

Asp Arg Leu Asn Leu Pro Ile Arg Leu Glu Gly Leu Asn Phe Val Asn  
 245 250 255

Trp Cys Met Tyr Tyr Ile Cys Val Gly Ile Gly Leu Met Lys Ile Phe  
 260 265 270

Lys Gly Phe Leu Asp Phe Val Asn Thr Leu Thr Leu Ser Ile Lys Arg  
 275 280 285

Ser Arg Lys Gly Cys Glu Ser Cys Val Phe Asp Asp Met Cys Asn Asp  
 290 295 300

Asp His Val  
 305

<210> 14  
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 <212> PRT  
 <213> Arabidopsis sp.

<400> 14  
 His Ile Ile Leu Ile Ser  
 1 5

<210> 15  
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&lt;400&gt; 15

Met Phe Leu Arg Phe Phe Tyr Phe Tyr Phe Leu Phe Leu Ala Arg Asn  
 1 5 10 15

Leu Thr Arg Ile Tyr Val Thr Lys Ile Val Glu Tyr Gln Lys Ala Lys  
 20 25 30

Ile Phe Tyr Leu Lys Ile Thr Ile Glu His  
 35 40

&lt;210&gt; 16

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 16

Phe Lys Ser Phe Tyr Asn Tyr Ile Phe Ile Thr His Pro Phe  
 1 5 10

&lt;210&gt; 17

&lt;211&gt; 26

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 17

Glu Lys Leu Gly Asp Leu Ile Asn Val Ile Asn Ser Lys Lys Tyr Arg  
 1 5 10 15

Ile Tyr Val Glu Val Leu Asn Ala Tyr Asn  
 20 25

&lt;210&gt; 18

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 18

Ile Tyr Glu Leu Asn Asn Ile Ala Ile Tyr Ile Phe Leu Lys Ile  
 1 5 10 15

&lt;210&gt; 19

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 19

Thr His Phe Val Ser Ser Ile Tyr Ala  
 1 5

<210> 20  
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 Tyr Lys Ser Tyr Arg Thr Leu Gln Asn Val Tyr Ile Asp Leu Ser Thr  
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 Phe Phe His Trp Phe Thr Lys Pro Ser Cys His Ile Asn Met Ser  
                     20                    25                    30

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 Arg Leu Phe Phe Tyr Asn Ile Val Tyr Glu Phe Lys Leu Glu Leu Ser  
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 Asn Val Lys Gln Thr Gln His Leu His Thr Tyr Ser Thr Ile Phe  
                     20                    25                    30

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 Lys Leu Lys Phe Ser  
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<210> 24  
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<400> 24  
 Ile Ser His Ile Ile Phe Leu Leu Lys Gln Ala Ser Pro Asn Thr Phe  
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Leu Pro Asp Tyr Asn Phe Pro  
                     20

<210> 25  
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<400> 25  
 Gly Phe Leu Gln Lys Lys Ile Asn Phe Leu Phe Lys Lys Pro Phe Ala  
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Leu Ser Phe Ser Pro Thr Ser Glu Lys Thr Arg Lys Lys Glu Glu Ala  
                     20                    25                    30

Ser Gly

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 <212> PRT  
 <213> Arabidopsis sp.

<400> 26  
 Trp Arg Arg Leu Val Ser Leu Gln Thr Tyr Met Asn  
     1                    5                    10

<210> 27  
 <211> 8  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 27  
 Leu Gly Tyr Glu Ile His Ile Phe  
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<210> 28  
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 <213> Arabidopsis sp.

<400> 28  
 Leu Cys Val Tyr Asp Arg Ser Ile Thr Phe Arg Val Glu Phe Ser Cys  
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Asp Leu Leu Cys Tyr Ser Ser His Ala  
                     20                    25

<210> 29  
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 Ser Ile Lys Leu Leu Phe Leu Asn Leu Ser Arg Lys Thr Met Arg Thr  
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Met Val Arg Val Cys His Pro Asn  
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<210> 30  
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Lys Ser Lys Ser Lys Arg Arg Asp Phe Cys Ile Ser Arg  
1 5 10

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<400> 31  
Glu Thr Phe Gly Cys Phe Asn Ile Leu Phe Ser Ser Val Cys Phe Ser  
1 5 10 15

Glu Asn

<210> 32  
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1 5

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Ser His Asn Tyr Thr Ile Pro Lys Arg Cys  
1 5 10

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<400> 34  
Asp Thr Ser Asn Lys Gln Leu Tyr Ile Ser His Asn Leu  
1 5 10

<210> 35  
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 Lys Glu Lys Phe Pro Asn Phe  
 1 5

<210> 36  
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<400> 36  
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<400> 37  
 Lys Met Pro Ala Asn Arg  
 1 5

<210> 38  
 <211> 12  
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<400> 38  
 Arg His Pro Asp Leu Ser Gly Ile Gln Asn Leu Glu  
 1 5 10

<210> 39  
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 <212> PRT  
 <213> Arabidopsis sp.

<400> 39  
 Tyr Ile Tyr Asn Ile Lys Leu Glu Leu Arg Leu  
 1 5 10

<210> 40  
 <211> 16  
 <212> PRT  
 <213> Arabidopsis sp.



&lt;400&gt; 40

Asn Lys Ile Glu Asn Asn Ser Arg Phe Phe Cys Phe Cys Gln Thr Lys  
 1 5 10 15

&lt;210&gt; 41

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 41

Tyr Asn Leu Phe Phe Leu Val Gln Arg Asn  
 1 5 10

&lt;210&gt; 42

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 42

Ile Gly Pro Asn Cys Phe Phe Phe Asn Ile Gln Pro Lys Lys Pro Arg  
 1 5 10 15

Leu Met His Ile Ser Arg Asn Arg Asn Gln Asn Phe Cys Ile Gln Val  
 20 25 30

Phe

&lt;210&gt; 43

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 43

Phe His Tyr Ile  
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&lt;210&gt; 44

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 44

Ser Pro Val Ser Glu Ile  
 1 5

&lt;210&gt; 45

&lt;211&gt; 8

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 45

Lys Ile Ile Tyr Leu Tyr Ile Thr  
 1 5

&lt;210&gt; 46

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 46

Leu Thr Glu Lys Ile Arg Ala Glu Ile His Ser Lys Cys Gly Tyr Ser  
 1 5 10 15

Cys Phe Thr Pro Ser Ile Val  
 20

&lt;210&gt; 47

&lt;211&gt; 8

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 47

Leu Lys Pro Ala Arg Cys Arg Gly  
 1 5

&lt;210&gt; 48

&lt;211&gt; 22

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 48

Trp Arg Arg Gln Gln Ile Thr Phe Val Glu Asn Ala Lys Pro Thr Ser  
 1 5 10 15

Ser Phe Gln Cys Leu Ile  
 20

&lt;210&gt; 49

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 49

Phe Leu Arg Arg Ser Arg Leu Cys Ser  
 1 5

&lt;210&gt; 50

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

<400> 50  
 Gly Ser Arg Leu Cys Ser  
           1                  5

<210> 51  
 <211> 7  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 51  
 Arg Arg Cys Thr Ile Ile Ser  
           1                  5

<210> 52  
 <211> 13  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 52  
 Arg Cys Thr Ile Ile Thr Lys Cys Gln Ala Ser Asn Cys  
           1                  5                  10

<210> 53  
 <211> 21  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 53  
 Glu Ala Thr Thr Ile His Tyr Met Gly Leu His Gln Lys Ala Cys Val  
           1                  5                  10                  15

Phe Phe Val Ser Tyr  
                   20

<210> 54  
 <211> 13  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 54  
 Phe Gln Asn Ile Asn His Ile Leu Tyr Ser Asn His Ser  
           1                  5                  10

<210> 55  
 <211> 6  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 55  
 Cys Ile Tyr Thr Phe Leu  
           1                  5

<210> 56  
 <211> 74  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 56  
 His Cys Ser Ser Gln Leu Met Ala Glu Ser Asp Ser Val Ile Gly Lys  
           1                  5                  10                  15  
 Arg Gln Ile Tyr Tyr Leu Asn Gly Glu Ala Leu Glu Leu Ser Ser Glu  
                   20                  25                  30  
 Glu Asp Glu Glu Asp Glu Glu Glu Asp Glu Glu Glu Ile Lys Lys Glu  
           35                  40                  45  
 Lys Cys Glu Phe Ser Glu Asp Val Asp Arg Phe Ile Trp Leu Val Phe  
           50                  55                  60  
 Ala Leu His Met Phe Leu Ile Ile Asn Leu  
           65                  70

<210> 57  
 <211> 41  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 57  
 Ser Ile Phe Asn Lys Leu Leu Lys Lys Phe Ser Gly Arg Leu Gly Arg  
           1                  5                  10                  15  
 Thr Met Val Trp Met Ile Trp Ser Cys Gly Val Leu Ser Pro Ser Thr  
                   20                  25                  30  
 Ser Lys Trp Met Phe Arg Thr Tyr Trp  
           35                  40

<210> 58  
 <211> 17  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 58  
 Gln Tyr Ser Asn Lys Asn Phe Ile Arg Arg Ser Ile Thr Phe Leu Leu  
           1                  5                  10                  15  
 Ile

<210> 59  
 <211> 15  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 59

Phe Leu Leu Phe Phe Val Val Arg Asn Val Leu Asn Phe Gln Ile  
 1 5 10 15

&lt;210&gt; 60

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 60

Cys Arg Lys Asp Thr Met Asn Ser Ser Leu Arg Met Met Glu Leu Leu  
 1 5 10 15

Val Arg Leu Leu Ile  
 20

&lt;210&gt; 61

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 61

His Pro Arg Gln  
 1

&lt;210&gt; 62

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 62

Leu Leu Leu Ser Arg Ile Leu Leu Ile Asp Val Ile Ala Val Val Ala  
 1 5 10 15

Trp

&lt;210&gt; 63

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 63

Ile Phe Leu Phe  
 1

&lt;210&gt; 64

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

<400> 64

Phe Ser His Lys Lys Gly Arg  
1 5

<210> 65

<211> 20

<212> PRT

<213> Arabidopsis sp.

<400> 65

Ser Tyr Met Phe Leu Phe Tyr Phe Ile Ile Cys Phe Thr Asp Ile Arg  
1 5 10 15

Leu Ser Tyr Ala  
20

<210> 66

<211> 4

<212> PRT

<213> Arabidopsis sp.

<400> 66

Ile Arg Lys His  
1

<210> 67

<211> 17

<212> PRT

<213> Arabidopsis sp.

<400> 67

Ile His Leu Asn Tyr Phe Val Ser Phe Thr Thr Leu Ile Tyr Lys Val  
1 5 10 15

Lys

<210> 68

<211> 12

<212> PRT

<213> Arabidopsis sp.

<400> 68

Leu Asp Cys Phe Gly Leu Ser Glu Arg Arg Gln Ile  
1 5 10

<210> 69

<211> 4

<212> PRT

<213> Arabidopsis sp.

<400> 69  
 Thr Thr Met Gln  
 1

<210> 70  
 <211> 25  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 70  
 Ala Leu Leu Pro Gln Gly Leu Tyr Leu Ser Pro Ser Leu Ser Gln Phe  
 1 5 10 15

Phe Cys Leu Phe Leu Asn Tyr Val Tyr  
 20 25

<210> 71  
 <211> 8  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 71  
 Ile Gly Glu Glu Cys Asp Arg Ser  
 1 5

<210> 72  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 72  
 Ser Cys Asp Gly  
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<210> 73  
 <211> 28  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 73  
 Leu Tyr Ile Lys Gln Asp Cys Gly Leu Arg Ser Lys Gln His Tyr Val  
 1 5 10 15

Asp Ala Cys Arg Glu Gly Ser Leu Leu Glu Arg Asn  
 20 25

<210> 74  
 <211> 9  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 74

Asp Ile Trp Glu Lys Gln Val Lys Lys  
 1 5

&lt;210&gt; 75

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 75

Cys Ile Asn Ile Tyr Thr Tyr Thr Val Phe Leu Asp Tyr Ala Gly Ser  
 1 5 10 15

Gln Leu

&lt;210&gt; 76

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 76

Cys Cys Ile Lys His Thr Ser Gly Ala  
 1 5

&lt;210&gt; 77

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 77

Asp Val Pro Arg Asp Leu Gln Leu His Ala Arg Thr Arg Ser Met Tyr  
 1 5 10 15

Tyr Val Ile Arg Pro  
 20

&lt;210&gt; 78

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 78

Gln Asn Tyr Thr Lys Thr Gln Ser Gly Thr Leu Thr Tyr Val Val Ile  
 1 5 10 15

Ile Leu Met Thr Cys Met Leu Lys Thr His Glu Val Ser Tyr Met Cys  
 20 25 30

&lt;210&gt; 79

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.



&lt;400&gt; 79

Trp Phe Tyr His Arg Leu Pro Lys Lys Tyr Leu Glu Lys Val Val Gly  
 1 5 10 15

Arg Ser Ala Lys Asn Arg Asp Ser Glu Asn Met Leu Val Ile Arg Leu  
 20 25 30

Leu

&lt;210&gt; 80

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 80

Arg Lys Gln Leu Val Glu Lys Leu Ser Phe Ile Ser Thr Thr His His  
 1 5 10 15

Ala Leu Ala Ser Gln Asn Val Asp Ser Asn Ala Leu Val  
 20 25

&lt;210&gt; 81

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 81

Leu Thr Lys Ile Ala Ala Arg Asn Ile Ala Gly Met Ser Phe Asn Phe  
 1 5 10 15

Ser

&lt;210&gt; 82

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 82

Ala Gly Arg Ser Met Arg Phe Asn Leu Asn Met Ser Leu Tyr Phe Leu  
 1 5 10 15

Phe Arg Cys Ser Lys Asp Cys Asn Asn Arg Phe Gly Gly Cys Asn Cys  
 20 25 30

Ala Ile Gly Gln Cys Thr Asn Arg Gln Cys Pro Cys Phe Ala Ala Asn  
 35 40 45

Arg Glu Cys Asp Pro Asp Leu Cys Arg Ser Cys Pro Leu Arg  
 50 55 60

<210> 83  
 <211> 66  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 83  
 His Phe His Phe Asn Ile Ser Leu Tyr Lys Phe Tyr Asn Gln Ser Asn  
     1                    5                    10                    15  
 Ser Asn Gln Lys Ser Tyr Lys Lys Asn Phe Ile Tyr Ser Cys Gly Asp  
                     20                    25                    30  
 Gly Thr Leu Gly Glu Thr Pro Val Gln Ile Gln Cys Lys Asn Met Gln  
                     35                    40                    45  
 Phe Leu Leu Gln Thr Asn Lys Lys Val Ile Asn Val Lys Ser Val Pro  
                     50                    55                    60  
 Lys Ile  
     65

<210> 84  
 <211> 20  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 84  
 Leu Tyr Glu Arg His Leu Thr Ile Ile Ser Arg Ile Leu Leu Asp Ser  
     1                    5                    10                    15  
 His Trp Lys Val  
                     20

<210> 85  
 <211> 41  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 85  
 Cys Ser Trp Met Gly Cys Ile Tyr Met Gly Lys Gln Ser Cys Lys Tyr  
     1                    5                    10                    15  
 Lys Asn Lys Phe Asn Ser Tyr Trp Cys Ile His Asn Thr Phe Phe Phe  
                     20                    25                    30  
 Leu Ile Met Phe Tyr Thr Leu Asp His  
                     35                    40

<210> 86  
 <211> 13  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 86

Ile Tyr Cys Val Ile Trp Phe Asp Pro Ser Gly Leu Ser  
 1 5 10

&lt;210&gt; 87

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 87

Val Ser Arg Arg Ile Tyr Trp Arg Thr Asp His Ser  
 1 5 10

&lt;210&gt; 88

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 88

Ala Trp Glu Asn Arg Arg Ser Asp Trp Phe Phe Leu Pro Leu Tyr Leu  
 1 5 10 15

Glu

&lt;210&gt; 89

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 89

Ser Gly Asn Phe Arg Ile Ile Leu Lys  
 1 5

&lt;210&gt; 90

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 90

Arg Phe Asn His Ser Arg Val Thr His Leu Phe Glu Ser Lys  
 1 5 10

&lt;210&gt; 91

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 91

His Leu Phe Tyr Ser Ser Lys Ser Met Leu Ala Val Lys Glu Thr Ser  
 1 5 10 15

Ser Asn Phe Ser Ile Thr Gln Gln Asp Leu Thr Ala Thr Pro Arg Tyr  
                   20                                  25                                  30

<210> 92  
 <211> 19  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 92  
 Ala Val Ile Leu Tyr Leu Glu Gln Ile Leu Thr Leu Tyr Lys Gln Lys  
   1                                  5                                  10                                  15

Tyr Leu Cys

<210> 93  
 <211> 15  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 93  
 Leu Asn Arg Val Ser Thr Leu Leu Val Val Asp Trp Phe Ser Tyr  
   1                                  5                                  10                                  15

<210> 94  
 <211> 50  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 94  
 Arg Tyr Ser Lys Lys Leu Lys Leu Ile Leu Asn Asp Phe Phe Leu Ser  
   1                                  5                                  10                                  15

Arg Lys Phe Arg Leu Arg Lys Phe Met Val Ser Cys Ala Val Asp Asp  
                   20                                  25                                  30

Cys Glu Arg Arg Ser Glu Asp Trp Ser Ile Cys Gly Glu Ser Asn Arg  
                   35                                  40                                  45

Arg Arg  
       50

<210> 95  
 <211> 21  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 95  
 Gly Ala Phe Leu Arg Leu Leu Leu Trp Thr Arg Thr Cys Gly Leu Val  
   1                                  5                                  10                                  15

Ala Trp Ser Arg Thr  
                   20

<210> 96  
 <211> 5  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 96  
 Lys Asp Trp Cys Phe  
           1                  5

<210> 97  
 <211> 28  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 97  
 Gly Ser Pro Ser Ser Ser Leu Val Phe Asp Leu Arg Arg Ser Ser Asn  
           1                  5                  10                  15

Ser Ser Ser Pro Phe Phe Met Leu Trp Tyr Ile Asn  
                   20                  25

<210> 98  
 <211> 7  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 98  
 Cys Asn Ala Ile Leu Cys Tyr  
           1                  5

<210> 99  
 <211> 52  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 99  
 Val Ser Val Leu Phe Val Leu Gly Cys Phe Val Cys Ile Ile Cys Val  
           1                  5                  10                  15

Leu Thr Phe Lys Val Phe Phe Leu Tyr Phe Asn Leu Lys Thr Met Phe  
                   20                  25                  30

Met Leu Leu Val Cys Ile Asp Leu Trp Lys Lys Lys Ala Leu His Asn  
           35                  40                  45

Phe Thr Phe Ile  
           50

<210> 100  
 <211> 33  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 100  
 Ser Ser Phe Ser Glu Lys Ser His Asn Thr Ser Leu Trp Tyr Val Met  
 1 5 10 15

Tyr Lys Asn Val Lys Ile Met Gly Phe Ile Ile Lys Lys Lys Tyr Trp  
 20 25 30

Leu

<210> 101  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 101  
 Met Lys Tyr Ser  
 1

<210> 102  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 102  
 Asn Phe Arg Tyr  
 1

<210> 103  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 103  
 Leu Val Trp Phe  
 1

<210> 104  
 <211> 8  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 104  
 Asn Val Phe Arg Asp Leu Ile Leu  
 1 5

<210> 105  
 <211> 10  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 105

Tyr Met Glu Glu Ser Ser Thr Lys Trp Leu  
 1 5 10

&lt;210&gt; 106

&lt;211&gt; 8

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 106

Leu Thr Lys Gly Phe Thr Leu Met  
 1 5

&lt;210&gt; 107

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 107

His Leu Val Ser Lys Gln Ile Lys Thr Lys Lys Lys Lys Lys Ala Leu  
 1 5 10 15

&lt;210&gt; 108

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 108

Asn Pro Lys Val Thr Ile Phe Lys Lys Ser Lys Leu  
 1 5 10

&lt;210&gt; 109

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 109

Met Phe Gly Ile Ala Asn Asp Tyr Cys  
 1 5

&lt;210&gt; 110

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 110

Met Leu Asn Ile His Glu Asp Val Lys Asn Met Leu Asp Leu Trp Asn  
 1 5 10 15

Arg

&lt;400&gt; 115

Thr Trp Leu Pro Ile Thr Val Leu Met Leu Leu Tyr Arg Ser Phe Leu  
 1 5 10 15

His Pro Leu Phe Leu His Ile Gln Glu Thr Val Ser Ser His Phe Leu  
 20 25 30

Ser Ser Ser Gln Cys Phe Asn Leu Cys Glu Leu Arg Trp Asn Met Lys  
 35 40 45

Lys His Lys Arg Thr Gln Glu Thr Ala Gly Pro  
 50 55

&lt;210&gt; 116

&lt;211&gt; 5

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 116

Phe Asp His Phe Lys  
 1 5

&lt;210&gt; 117

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 117

Ser Pro Leu Ala Phe Leu Ala Ser Ser Ser Leu Tyr Leu Ser Ser Phe  
 1 5 10 15

Phe His Val Ser Leu Ser Ile Pro Pro Gln Leu Arg Ser Pro Ser Pro  
 20 25 30

Ala Phe Pro Leu Leu Phe Thr Arg Gln Met Ser Glu Ser Tyr Thr Arg  
 35 40 45

Ser Cys Phe Ser Ser Ser Ser Ser Leu  
 50 55

&lt;210&gt; 118

&lt;211&gt; 37

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 118

Ser Thr Val Ser Gln Glu Asn Gln Asn Ala Leu Phe Ser Ile Pro Ile  
 1 5 10 15

Ser Thr Ser Ala Gly Ser Phe Ser Ser Ser Pro Lys Leu Val Pro Leu  
 20 25 30

Gly Ser Lys Glu Pro  
 35



<210> 119  
 <211> 5  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 119  
 Ala Arg Pro Cys Leu  
           1                  5

<210> 120  
 <211> 27  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 120  
 Ile Gln Thr Lys Thr Cys Phe Leu Arg His Met Lys Asp Gly Cys Trp  
           1                  5                  10                  15

Leu Gly Phe Cys Ser Phe Trp Gly Tyr Thr Lys  
                   20                  25

<210> 121  
 <211> 31  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 121  
 Cys Gly Leu Glu Ser Trp Leu Ser Leu Trp Leu Thr Thr Leu Tyr Met  
           1                  5                  10                  15

Gly Ser Thr Trp Arg Arg Gly Gly Pro Arg Glu Pro Leu Trp Gln  
                   20                  25                  30

<210> 122  
 <211> 5  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 122  
 Cys Gly Gly Gly Gly  
           1                  5

<210> 123  
 <211> 23  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 123  
 Lys Val Leu Trp Trp Trp Leu Arg Arg Ile Asp Leu Thr Ser Pro Phe  
           1                  5                  10                  15

Val Trp Arg Val Ser Ile Leu  
                   20

<210> 124  
 <211> 12  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 124  
 Thr Gly Val Cys Ile Thr Ser Val Leu Glu Leu Val  
           1                  5                  10

<210> 125  
 <211> 9  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 125  
 Arg Ser Ser Lys Gly Phe Trp Ile Leu  
           1                  5

<210> 126  
 <211> 36  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 126  
 Ala Leu Arg Gly Arg Glu Lys Ala Val Asn His Val Phe Leu Met Ile  
           1                  5                  10                  15

Cys Val Met Met Ile Met Cys Lys Ile Phe Asp Ile Leu Tyr Ser Ser  
                   20                  25                  30

Leu Glu Cys Phe  
                   35

<210> 127  
 <211> 13  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 127  
 Asp Phe Phe Ile Phe Ile Phe Tyr Phe Leu Leu Gly Ile  
           1                  5                  10

<210> 128  
 <211> 7  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 128  
 Pro Val Tyr Met Ser Gln Lys  
           1                  5

<210> 129  
 <211> 9  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 129  
 Asn Ile Arg Lys Gln Lys Tyr Phe Ile  
           1                          5

<210> 130  
 <211> 14  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 130  
 Pro Leu Asn Ile Asn Leu Ser Leu Phe Ile Ile Ile Phe Leu  
           1                          5                          10

<210> 131  
 <211> 10  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 131  
 His Thr Leu Phe Lys Lys Asn Leu Glu Ile  
           1                          5                          10

<210> 132  
 <211> 8  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 132  
 Ile Val Lys Asn Ile Gly Phe Thr  
           1                          5

<210> 133  
 <211> 8  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 133  
 Met Arg Ile Ile Lys Phe Thr Asn  
           1                          5

<210> 134  
 <211> 5  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 134

Pro Tyr Ile Tyr Phe  
1 5

&lt;210&gt; 135

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 135

Arg Phe Lys Leu Ile Leu Phe Leu Pro Tyr Met His Asn Ile  
1 5 10

&lt;210&gt; 136

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 136

Leu Gly Met Asn Thr Asn Ile Tyr Asn Asp Ile Asn Ile Ser Leu Thr  
1 5 10 15Gly His Ser Lys Met Tyr Ile Leu Ile Tyr Gln His Phe Phe Ile Gly  
20 25 30Leu Leu Asn Gln Val Val Thr  
35

&lt;210&gt; 137

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 137

Val Asn Ala Phe Phe Phe Ile Ile Leu Tyr Met Asn Leu Asn Leu Ser  
1 5 10 15Cys Gln Thr Ser Ser Lys Pro Asn Ile Tyr Ile His Ile Val Leu Tyr  
20 25 30Phe Glu Asn  
35

&lt;210&gt; 138

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 138

Asn Phe Leu Lys Phe Pro Ile Leu Phe Ser Phe  
1 5 10

<210> 139  
 <211> 55  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 139  
 Ser Lys Gln Val Gln Ile Arg Phe Phe Gln Ile Ile Ile Phe Leu Asn  
           1                  5                  10                  15  
 Lys Val Phe Tyr Lys Lys Lys Ser Thr Ser Tyr Leu Lys Asn Pro Leu  
                   20                  25                  30  
 His Tyr Pro Phe His Gln His Gln Arg Arg Arg Glu Lys Lys Lys Arg  
                   35                  40                  45  
 Arg Val Val Asn Gly Glu Gly  
           50                  55

<210> 140  
 <211> 6  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 140  
 Phe His Ser Lys His Ile  
           1                  5

<210> 141  
 <211> 15  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 141  
 Val Met Lys Ser Ile Tyr Phe Asn Cys Val Phe Met Ile Asp Gln  
           1                  5                  10                  15

<210> 142  
 <211> 19  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 142  
 His Leu Gly Leu Asn Phe Leu Val Ile Tyr Tyr Val Ile Arg Pro Met  
           1                  5                  10                  15

His Asp Pro

<210> 143  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 143

Asn Phe Tyr Phe

1

&lt;210&gt; 144

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 144

Ile Cys Leu Gly Lys Pro

1

5

&lt;210&gt; 145

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 145

Gly Phe Ala Thr Arg Thr Lys Ser Asp Lys Arg Ala Asn Arg Lys Gly

1

5

10

15

Glu Ile Ser Ala Tyr Gln Gly Lys Arg His Leu Val Ala Leu Ile Phe

20

25

30

Tyr Ser Leu Leu Tyr Val Phe Leu Lys Ile Lys Glu Arg Arg Gly Leu

35

40

45

Asn Leu Ile Thr Ile Arg Phe Gln Arg Asp Val Lys Ile His Leu Ile

50

55

60

Asn Ser Tyr Thr Leu Val Ile Ile Phe Lys Thr Lys Lys Arg Asn Phe

65

70

75

80

Gln Thr Phe Lys Leu Lys Thr Glu Phe Arg Lys Cys Gln Arg Ile Asp

85

90

95

Asn Asp Ile Gln Ile Cys Arg Val Ser Lys Thr

100

105

&lt;210&gt; 146

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 146

Asn Lys Lys Ile Ile Asn Ile Phe Ile Ile

1

5

10

&lt;210&gt; 147

&lt;211&gt; 30

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 147

Ser Trp Asn Leu Gly Tyr Lys Ile Lys Leu Lys Ile Ile Val Asp Phe  
 1 5 10 15

Phe Val Phe Val Lys Gln Asn Ser Asn Thr Ile Cys Phe Phe  
 20 25 30

&lt;210&gt; 148

&lt;211&gt; 5

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 148

Tyr Lys Glu Thr Lys  
 1 5

&lt;210&gt; 149

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 149

Val Gln Ile Val Phe Phe Leu Thr Phe Ser Gln Lys Ser Gln Asp  
 1 5 10 15

&lt;210&gt; 150

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 150

Cys Ile Tyr Gln Glu Ile Glu Ile Lys Thr Phe Val Phe Lys Tyr Ser  
 1 5 10 15

Ser Phe Thr Ile Tyr Arg Val Gln Phe Leu Lys Phe Lys Lys Ser Phe  
 20 25 30

Thr Tyr Ile Leu Leu Asp  
 35

&lt;210&gt; 151

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 151

Gln Arg Lys Phe Glu Leu Arg Tyr Ile Pro Ser Val Ala Thr His Ala  
 1 5 10 15

Ser His His Gln Ser Phe Asp Leu Asn Gln Pro Ala Ala Glu Asp Asp  
 20 25 30

Asn Gly Gly Asp Asn Lys Ser Leu Leu Ser Arg Met Gln Asn Pro Leu  
                   35                                  40                                  45

Arg His Phe Ser Ala Ser Ser Asp Tyr Asn Ser Tyr Glu Asp Gln Gly  
           50                                  55                                  60

Tyr Val Leu Asp Glu Asp Gln Asp Tyr Ala Leu Glu Glu Asp Val Pro  
       65                                  70                                  75                                  80

Leu Phe Leu Asp Glu Asp Val Pro Leu Leu Pro Ser Val Lys Leu Pro  
                                   85                                  90                                  95

Ile Val Glu Lys Leu Pro Arg Ser Ile Thr Trp Val Phe Thr Lys Arg  
                   100                                  105                                  110

His Val Cys Phe Leu Phe Arg Thr Ser Phe Lys Ile Leu Ile Ile Tyr  
           115                                  120                                  125

Tyr Ile Val Ile Thr His Ser Ala Tyr Ile His Phe Phe Asn Ile Ala  
       130                                  135                                  140

Val Ala Ser  
 145

<210> 152  
 <211> 6  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 152  
 Trp Leu Lys Val Ile Leu  
   1                                  5

<210> 153  
 <211> 8  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 153  
 Leu Val Arg Asp Lys Ser Ile Ile  
   1                                  5

<210> 154  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 154  
 Met Val Arg His  
   1



<210> 155  
 <211> 26  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 155  
 Ala Val Lys Lys Met Arg Lys Met Lys Lys Lys Met Arg Lys Lys Ser  
           1                  5                  10                  15  
 Arg Lys Lys Asn Ala Asn Phe Leu Lys Met  
                   20                  25

<210> 156  
 <211> 5  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 156  
 Thr Asp Leu Tyr Gly  
           1                  5

<210> 157  
 <211> 7  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 157  
 Phe Leu His Tyr Ile Cys Ser  
           1                  5

<210> 158  
 <211> 25  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 158  
 Leu Leu Ile Cys Ser Pro Tyr Leu Ile Asn Cys Ser Arg Asn Phe Gln  
           1                  5                  10                  15  
 Asp Gly Trp Ala Gly Leu Trp Phe Gly  
                   20                  25

<210> 159  
 <211> 32  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 159  
 Ser Gly Arg Ala Ala Cys Ser Arg Gln Val Pro Arg Ser Gly Cys Phe  
           1                  5                  10                  15  
 Gly His Ile Gly Asn Asn Ile Arg Ile Lys Thr Ser Tyr Val Asp Gln  
                   20                  25                  30

<210> 160  
 <211> 12  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 160  
 Leu Ser Cys Leu Phe Asn Phe Cys Cys Phe Ser Ser  
     1                    5                    10

<210> 161  
 <211> 10  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 161  
 Ile Phe Lys Ser Asn Val Gly Lys Ile Gln  
     1                    5                    10

<210> 162  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 162  
 Trp Asn Cys Trp  
     1

<210> 163  
 <211> 14  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 163  
 Phe Asp Ile Gln Asp Asn Asn Tyr Cys Phe Pro Gly Phe Cys  
     1                    5                    10

<210> 164  
 <211> 59  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 164  
 Thr Ser Leu Pro Ser Leu His Gly Asn Phe Glu Ser Phe Phe Phe Asn  
     1                    5                    10                    15

Leu Ala Thr Lys Lys Gly Asp Asp His Thr Cys Phe Tyr Phe Ile Leu  
             20                    25                    30

Ser Phe Val Leu Gln Ile Phe Asp Cys His Met His Glu Lys Tyr Glu  
             35                    40                    45

Pro Glu Ser Arg Ser Val Ser Ile Lys Phe Ile  
             50                    55

<210> 165  
 <211> 15  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 165  
 Ile Ile Leu Leu Val Ser Gln Pro Leu Tyr Ile Arg Leu Ser Asp  
       1                  5                  10                  15

<210> 166  
 <211> 56  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 166  
 Ile Ala Leu Ala Cys Gln Ser Glu Asp Lys Ser Ser Leu Phe Glu Asp  
       1                  5                  10                  15  
 Glu Asp Arg Gln Pro Cys Ser Glu His Cys Tyr Leu Lys Val Ser Ile  
           20                  25                  30  
 Ser Leu Pro Leu Ser Leu Asn Phe Phe Val Tyr Ser Leu Ile Thr Phe  
           35                  40                  45  
 Ile Ser Tyr Trp Phe Asn Ile Lys  
       50                  55

<210> 167  
 <211> 50  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 167  
 Val Arg Ser Val Thr Glu Ala Asp His Val Met Asp Asn Asp Asn Ser  
       1                  5                  10                  15  
 Ile Ser Asn Lys Ile Val Val Ser Asp Pro Asn Asn Thr Met Trp Thr  
           20                  25                  30  
 Pro Val Glu Lys Asp Leu Tyr Leu Lys Gly Ile Glu Ile Phe Gly Arg  
           35                  40                  45  
 Asn Arg  
       50

<210> 168  
 <211> 68  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 168  
 Lys Asn Lys Asn Arg Phe Asn Ala Leu Ile Tyr Ile Leu Thr Leu Tyr  
       1                  5                  10                  15

Ser Leu Ile Met Leu Val Arg Ser Cys Asp Val Ala Leu Asn Ile Leu  
 20 25 30

Arg Gly Leu Lys Thr Cys Leu Glu Ile Tyr Asn Tyr Met Arg Glu Gln  
 35 40 45

Asp Gln Cys Thr Met Ser Leu Asp Leu Asn Lys Thr Thr Gln Arg His  
 50 55 60

Asn Gln Val His  
 65

<210> 169

<211> 23

<212> PRT

<213> Arabidopsis sp.

<400> 169

Lys His Met Lys Phe Pro Ile Cys Val Asp Gly Phe Ile Thr Gly Tyr  
 1 5 10 15

Gln Lys Ser Ile Ser Lys Lys  
 20

<210> 170

<211> 22

<212> PRT

<213> Arabidopsis sp.

<400> 170

Val Gly Pro Gln Lys Ile Glu Thr Pro Lys Ile Cys Ser Leu Ser Ala  
 1 5 10 15

Cys Phe Lys Glu Asn Asn  
 20

<210> 171

<211> 41

<212> PRT

<213> Arabidopsis sp.

<400> 171

Ala Leu His Thr Met His Leu Gln Val Lys Met Trp Thr Ala Met Pro  
 1 5 10 15

Leu Phe Asn Ser Arg Lys Leu Leu Arg Glu Ile Leu Arg Val Cys His  
 20 25 30

Ser Ile Phe Pro Lys Pro Glu Asp Pro  
 35 40

<210> 172  
 <211> 108  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 172  
 Val Cys Ile Phe Cys Ser Gly Ala Gln Arg Ile Ala Thr Ile Ala Leu  
           1                  5                  10                  15  
 Glu Asp Val Ile Val Gln Leu Ala Asn Ala Gln Ile Asp Asn Val Leu  
                   20                  25                  30  
 Val Leu Leu Leu Ile Val Asn Ala Ile Gln Ile Phe Val Gly Val Val  
                   35                  40                  45  
 Leu Leu Gly Asn Thr Phe Thr Ser Ile Ser Leu Tyr Thr Asn Ser Ile  
           50                  55                  60  
 Ile Lys Val Ile Gln Thr Lys Ser Leu Ile Lys Lys Thr Leu Tyr Ile  
           65                  70                  75                  80  
 Ala Val Glu Met Ala Leu Leu Val Arg His Gln Cys Lys Ser Asn Ala  
                   85                  90                  95  
 Arg Thr Cys Asn Ser Ser Phe Lys Pro Ile Lys Arg  
                   100                  105

<210> 173  
 <211> 17  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 173  
 Ser Thr Ser Asn Pro Tyr Arg Lys Phe Lys Thr Asn Tyr Thr Lys Asp  
           1                  5                  10                  15  
 Ile

<210> 174  
 <211> 7  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 174  
 Leu Ser Phe Pro Val Phe Tyr  
           1                  5

<210> 175  
 <211> 39  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 175

Ile Leu Ile Gly Lys Ser Asp Val His Gly Trp Gly Ala Phe Thr Trp  
 1 5 10 15

Val Ser Asn His Val Asn Ile Arg Ile Ser Leu Ile Val Ile Gly Ala  
 20 25 30

Phe Ile Thr Leu Phe Phe Phe  
 35

&lt;210&gt; 176

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 176

Cys Phe Ile Leu  
 1

&lt;210&gt; 177

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 177

Thr Ile Lys Tyr Ile Val  
 1 5

&lt;210&gt; 178

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 178

Tyr Gly Leu Thr Arg Gln Asp Ser Leu Lys Lys Asn Glu Tyr Leu Gly  
 1 5 10 15

Glu Tyr Thr Gly Glu Leu Ile Thr His Asp Glu Ala Asn Glu Arg Gly  
 20 25 30

Arg Ile Glu Asp Arg Ile Gly Ser Ser Tyr Leu Phe Thr Leu Asn Asp  
 35 40 45

Gln Val Thr Ser Glu  
 50

&lt;210&gt; 179

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 179

Ser Asn Val Leu Ile Ile Arg Gly Leu His Ile Tyr Ser Asn Gln Ser  
 1 5 10 15

Asn Ile Tyr Phe Thr Ala Arg Asn Arg Cys Ser Pro  
 20 25

&lt;210&gt; 180

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 180

Arg Lys Arg Val Gln Ile Ser Gln Ser Leu Ser Lys Thr  
 1 5 10

&lt;210&gt; 181

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 181

Leu Leu Arg Gln Gly Thr Lys Pro Leu Tyr Phe Ile Leu Asn Lys Tyr  
 1 5 10 15

&lt;210&gt; 182

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 182

His Tyr Thr Asn Lys Asn Thr Tyr Val Ser Phe Phe Ser  
 1 5 10

&lt;210&gt; 183

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 183

Ile Val Tyr Gln Leu Tyr Ser Ser Leu Ile Gly Phe His Ile Glu Asp  
 1 5 10 15

Ile Pro Arg Asn Ser Asn Ser Phe  
 20

&lt;210&gt; 184

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

1

• • •



10

10



&lt;400&gt; 188

Lys Gln Cys Leu Cys Cys  
 1 5

&lt;210&gt; 189

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 189

Thr Phe Gly Lys Lys Lys Leu Cys Thr Thr Leu His Leu Phe Ser Leu  
 1 5 10 15

His Leu Ala Lys Asn His Ile Thr Gln Val Cys Gly Thr  
 20 25

&lt;210&gt; 190

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 190

Cys Thr Lys Met Ser Lys  
 1 5

&lt;210&gt; 191

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 191

Trp Val Leu Ser Leu Lys Lys Asn Ile Gly Tyr Glu  
 1 5 10

&lt;210&gt; 192

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 192

Ser Ile Val Arg Ile Leu Gly Ile Ser Ser Phe Gly Phe Lys Thr Phe  
 1 5 10 15

Phe Glu Ile

&lt;210&gt; 193

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 193

Phe Cys Ser Leu Leu Ser Asn Thr Trp Lys Asn His Gln Gln Ser Gly  
 1 5 10 15

Cys Ser Leu Arg Lys Val Leu Leu  
 20

&lt;210&gt; 194

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 194

Cys Lys Tyr Val Phe Asp Ala Ser Asn Ile  
 1 5 10

&lt;210&gt; 195

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 195

Tyr Leu Asn Lys  
 1

&lt;210&gt; 196

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 196

Lys Gln Lys Lys Arg Lys Lys Leu Phe Lys Ile Arg Lys  
 1 5 10

&lt;210&gt; 197

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 197

Leu Phe Ser Lys Asn Leu Asn Tyr Lys Leu Lys Cys Leu Glu Ser Arg  
 1 5 10 15

Thr Thr Ile Ala Lys Tyr Lys Cys  
 20

&lt;210&gt; 198

&lt;211&gt; 5

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 198

Ile Tyr Met Lys Met  
1 5

&lt;210&gt; 199

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 199

Lys Thr Cys Trp Ile Cys Gly Ile Val Asn Asp His Gly  
1 5 10

&lt;210&gt; 200

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 200

Met Ala Gly Ser  
1

&lt;210&gt; 201

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 201

Ile His Tyr Phe  
1

&lt;210&gt; 202

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 202

Lys Ser Asn Phe Phe Ile Ser Ile Ile Cys Phe Lys Glu Lys Lys Asn  
1 5 10 15Thr Arg Arg Leu Ser Ile Cys Arg Leu Cys Ser Ser Val Asn Leu Tyr  
20 25 30Phe Lys Thr Gly Gly Leu Phe Ile Thr Ile Ser Leu Asp Met Phe Leu  
35 40 45

&lt;210&gt; 203

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 203

Cys Arg Pro Lys Asn Arg Glu Ile Arg Lys Gly Thr Phe Val Val Ile  
 1                      5                      10                      15

Val Thr Lys Gln Lys Ser Leu Tyr  
 20

&lt;210&gt; 204

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 204

Ile Ile Arg Lys Asp Glu Lys Ile Lys Pro Leu  
 1                      5                      10

&lt;210&gt; 205

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 205

Leu Asp Asp His Arg Arg Gly Cys Gln Leu Gln Ser  
 1                      5                      10

&lt;210&gt; 206

&lt;211&gt; 34

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 206

Cys Phe Tyr Ile Asp Leu Ser Tyr Ile Leu Cys Ser Phe Thr Phe Lys  
 1                      5                      10                      15

Lys Gln Tyr His Pro Ile Phe Phe Leu Leu Leu Ser Val Ser Ile Phe  
 20                      25                      30

Ala Asn

&lt;210&gt; 207

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 207

Arg Asn Thr Lys Glu His Lys Lys Gln Leu Val Pro Asp Ser Thr Ile  
 1                      5                      10                      15

Ser Asn Asp Leu His  
 20

<210> 208  
 <211> 106  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 208  
 Pro Pro Pro Pro Ser Ile Phe Pro Leu Ser Phe Thr Ser Leu Ser Leu  
     1                    5                    10                    15  
 Tyr Leu Leu Asn Ser Gly His Arg Leu Arg Arg Phe Leu Cys Tyr Ser  
             20                    25                    30  
 Pro Gly Arg Cys Arg Ser Leu Ile His Asp Leu Val Ser His His Arg  
             35                    40                    45  
 Leu His Phe Asn Pro Gln Ser Leu Arg Lys Thr Arg Met Leu Cys Ser  
             50                    55                    60  
 Pro Phe Pro Ser Leu His Leu Leu Asp Arg Ser Leu His Arg Pro Ser  
             65                    70                    75                    80  
 Leu Cys Leu Trp Asp Gln Lys Asn His Glu His Asp His Val Tyr Lys  
                     85                    90                    95  
 Ser Arg Gln Lys Leu Val Ser Cys Asp Thr  
             100                    105

<210> 209  
 <211> 5  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 209  
 Lys Met Asp Val Gly  
     1                    5

<210> 210  
 <211> 15  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 210  
 Gly Phe Val Leu Phe Gly Ala Thr Arg Ser Asp Ala Asp Val Val  
     1                    5                    10                    15

<210> 211  
 <211> 32  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 211  
 Gln His Tyr Ile Trp Gly Leu Arg Gly Gly Glu Val Val Arg Glu Ser  
     1                    5                    10                    15

Arg Cys Gly Ser Asp Leu Trp Tyr Asn Val Val Val Glu Ala Lys Arg  
           20                          25                          30

<210> 212  
 <211> 11  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 212  
 Gly Arg Lys Ser Cys Gly Gly Gly Tyr Gly Gly  
   1                          5                          10

<210> 213  
 <211> 42  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 213  
 Pro Pro His Ser Phe Gly Gly Ser Gln Phe Cys Glu Leu Val Tyr Val  
   1                          5                          10                          15

Leu His Leu Cys Trp Asn Trp Phe Asn Glu Asp Leu Gln Arg Val Phe  
                           20                          25                          30

Gly Phe Cys Glu Tyr Val Asp Phe Glu His  
           35                          40

<210> 214  
 <211> 6  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 214  
 Glu Val Glu Lys Arg Leu  
   1                          5

<210> 215  
 <211> 4  
 <212> PRT  
 <213> Arabidopsis sp.

<400> 215  
 Ile Met Cys Phe  
   1

<210> 216  
 <211> 27  
 <212> PRT  
 <213> Arabidopsis sp.

&lt;400&gt; 216

Ser Cys Val Arg Tyr Leu Thr Tyr Tyr Thr His Leu Leu Asn Val Phe  
 1                      5                      10                      15

Glu Ile Phe Leu Phe Leu Phe Ser Ile Ser Cys  
                     20                      25

&lt;210&gt; 217

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 217

Glu Phe Asn Pro Tyr Ile Cys His Lys Asn Ser Arg Ile Ser Glu Ser  
 1                      5                      10                      15

Lys Asn Ile Leu Ser Lys Asn Asn His  
                     20                      25

&lt;210&gt; 218

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 218

Leu Tyr Phe Tyr Asn Thr Pro Phe Leu Arg Lys Thr Trp Arg Phe Asn  
 1                      5                      10                      15

&lt;210&gt; 219

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 219

Lys Ile Ser Asp Leu Arg Arg Ser Phe Lys Cys Val  
 1                      5                      10

&lt;210&gt; 220

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 220

Leu Asn Leu Arg Ile Glu  
 1                      5

&lt;210&gt; 221

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 221

Tyr Ser His Ile Tyr Ile Phe Glu Asp Leu Asn Ser Phe Cys Phe Phe  
 1 5 10 15

His Ile Cys Ile Ile Tyr Lys Leu Lys  
 20 25

&lt;210&gt; 222

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 222

Ile Leu Ile Tyr Ile Met Thr Leu Ile  
 1 5

&lt;210&gt; 223

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 223

Val Leu Pro Asp Thr Pro Lys Cys Ile Tyr  
 1 5 10

&lt;210&gt; 224

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 224

Ser Ile Asn Ile Phe Ser Leu Val Tyr  
 1 5

&lt;210&gt; 225

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 225

Thr Lys Leu Ser His Lys Tyr Glu Leu Thr Pro Phe Phe Leu  
 1 5 10

&lt;210&gt; 226

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 226

Ala Val Lys Arg Gln Ala Asn Pro Thr Ser Thr Tyr Ile  
 1 5 10



74

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<400> 227  
Tyr Tyr Ile Leu Lys Ile Lys Ile Phe Leu Asn Phe Pro Tyr Tyr Phe  
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Pro Phe Lys Ala Ser Lys Ser Lys Tyr Val Ser Ser Arg Leu  
20 25 30

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Phe Ser Leu Ile Arg Phe Ser Thr Lys Lys Asn Gln Leu Leu Ile  
1 5 10 15

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<212> PRT  
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<400> 229  
Lys Thr Leu Cys Ile Ile Leu Phe Thr Asn Ile Arg Glu Asp Glu Lys  
1 5 10 15

Lys Arg Arg Gly Glu Trp Leu Met Glu Lys Val Ser Phe Thr Pro Asn  
20 25 30

Ile Tyr Glu Leu Thr Arg Leu  
35

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<211> 9  
<212> PRT  
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<400> 230  
Asn Pro Tyr Ile Leu Ile Val Cys Leu  
1 5

<210> 231  
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<400> 231  
Ile Asn Asn Ile  
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&lt;400&gt; 256

Thr Ala Gln Glu Ile Phe Arg Thr Val Gly Gln Asp Tyr Gly Leu Asp  
 1 5 10 15

Asp Leu Val Val Arg Arg Ala Leu Ala Lys Tyr Leu Glu Val Asp Val  
 20 25 30

Ser Asp Ile Leu Val Thr Ile Phe Glu  
 35 40

&lt;210&gt; 257

&lt;211&gt; 30

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 257

Lys Leu His Thr Ser Ile Asn Asn Phe Pro Ala Tyr Leu Ile Phe Val  
 1 5 10 15

Val Phe Arg Arg Glu Lys Cys Phe Lys Phe Ser Asn Leu Met  
 20 25 30

&lt;210&gt; 258

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 258

Glu Arg Tyr Asn Glu Leu Lys Leu Lys Asn Asp Gly Thr Ala Gly Glu  
 1 5 10 15

Ala Ser Asp Leu Thr Ser Lys Thr Ile Thr Thr Ala Phe Gln Asp Phe  
 20 25 30

Ala Asp Arg Arg His Cys Arg Arg Cys Met Val Thr Leu Asn Leu Ser  
 35 40 45

Phe Leu Ile  
 50

&lt;210&gt; 259

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 259

Pro Gln Lys Arg Glu Met Ile Ile His Val Phe Ile Leu Phe Tyr His  
 1 5 10 15

Leu Phe Tyr Arg Tyr Ser Ile Val Ile Cys Met Arg Ser Met Ser Pro  
 20 25 30

Ser Leu Asp Pro  
 35

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 Phe His Asn Pro Tyr Ile  
     1                    5

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 Val Ile Asn Leu Ile Arg Leu Leu Trp Leu Val Arg Ala Lys Thr Asn  
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 Leu Val Cys Leu Arg Met Lys Ile Asp Asn His Ala Val Ser Ile Val  
                     20                    25                    30  
 Thr Ser Arg Ser Leu Ser Leu Ser Leu Ser Leu Ser Ile Phe Leu Ser  
                     35                    40                    45  
 Ile Pro  
     50

<210> 263  
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<400> 263  
 Leu Arg Leu Leu Val Thr Gly Leu Ile Leu Asn Arg  
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 <212> PRT  
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 Gln Lys Leu Ile Met  
     1                    5

<210> 265

<211> 23

<212> PRT

<213> Arabidopsis sp.

<400> 265

Trp Ile Met Ile Thr Leu Tyr Gln Thr Arg Leu Trp Ser Gln Ile Gln  
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Thr Thr Leu Cys Gly Arg Leu  
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<212> PRT

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<400> 266

Arg Arg Ile Phe Thr  
 1 5

<210> 267

<211> 19

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Lys Glu Leu Arg Tyr Leu Gly Glu Thr Gly Lys Lys Ile Lys Ile Asp  
 1 5 10 15

Leu Met His

<210> 268

<211> 8

<212> PRT

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Tyr Ile Tyr Leu His Cys Ile Pro  
 1 5

<210> 269

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Leu Cys Trp Phe Ala Val Val Met Leu His  
 1 5 10

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 Thr Tyr Phe Gly Gly Leu Arg Arg Ala  
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 Arg Phe Thr Ile Thr Cys Ala Asn Lys Ile Asn Val Leu Cys His  
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Arg Asn Tyr Ser His Asp Met Tyr Val Lys Asn Thr  
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 Ser Phe Leu Tyr Val Leu Met Val Leu Ser Gln Val Thr Lys Lys Val  
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Ser Arg Lys Ser Ser Arg Ser Val Arg Lys Lys Ser Arg Leu Arg Lys  
 20 25 30

Tyr Ala Arg Tyr Pro Pro Ala Leu Lys Lys Thr Thr Ser Gly Glu Ala  
 35 40 45

Lys Phe Tyr Lys His Tyr Thr Pro Cys Thr Cys Lys Ser Lys Cys Gly  
 50 55 60

Gln Gln Cys Pro Cys Leu Thr His Glu Asn Cys Cys Glu Lys Tyr Cys  
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Gly Tyr Val Ile Gln Phe Phe Leu Ser Arg Lys Ile His Glu Ile  
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Gln Ser Leu Trp Arg Met  
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&lt;400&gt; 279

Lys Lys Leu Tyr Ile  
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&lt;210&gt; 280

&lt;211&gt; 7

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&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 280

Leu Trp Arg Trp His Ser Trp  
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&lt;210&gt; 281

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 281

Asp Thr Ser Ala Asn Pro Met Gln Glu His Ala Ile Pro Pro Ser Asn  
1 5 10 15

Gln

&lt;210&gt; 282

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 282

Lys Gly Asn Gln Arg Gln Ile Arg Thr Glu Asn Leu Lys Leu Ile Ile  
1 5 10 15Arg Lys Thr Phe Asn Tyr His Phe Pro Tyr Phe Thr Arg Phe Ser Leu  
20 25 30Glu Ser Leu Met Phe Met Asp Gly Val His Leu His Gly  
35 40 45

&lt;210&gt; 283

&lt;211&gt; 5

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 283

Leu Leu Val His Ser  
1 5

&lt;210&gt; 284

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 284

His Phe Phe Phe Phe Asn Asn Val Leu Tyr Phe Arg Pro Leu Asn Ile  
 1 5 10 15

Leu Cys Asp Met Val  
 20

&lt;210&gt; 285

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 285

Pro Val Arg Thr Leu Leu Lys Arg Met Ser Ile Ser Glu Asn Ile Leu  
 1 5 10 15

Glu Asn

&lt;210&gt; 286

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 286

Ser Leu Met Met Lys Leu Met Ser Val Gly Glu  
 1 5 10

&lt;210&gt; 287

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 287

Lys Ile Gly Leu Val Leu Pro Thr Ser Leu Pro  
 1 5 10

&lt;210&gt; 288

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 288

Leu Gln Asn Asn Phe Glu Val Thr Phe  
 1 5

&lt;210&gt; 289

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.



&lt;400&gt; 289

Ser Phe Ala Gly Tyr Thr Ser Ile Arg Ile Lys Val Thr Phe Ile Leu  
 1 5 10 15

Gln Leu Glu Ile Asp Ala Arg Arg Lys Gly Asn Glu Phe Lys Phe Leu  
 20 25 30

Asn His Ser Ala Arg Pro Asn Cys Tyr Ala Lys Val Leu Ser Arg Tyr  
 35 40 45

Thr Leu Ser  
 50

&lt;210&gt; 290

&lt;211&gt; 26

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 290

Thr Asn Thr Asn Ile Ile Gln Thr Lys Ile Leu Met Leu Val Ser Leu  
 1 5 10 15

Val Lys Ser Cys Ile Asn Phe Thr Arg Arg  
 20 25

&lt;210&gt; 291

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 291

Leu Val Phe Ile Leu Lys Ile Phe Gln Glu Thr Gln Thr His Phe Lys  
 1 5 10 15

&lt;210&gt; 292

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 292

Phe Phe Leu Val Glu Lys Ile  
 1 5

&lt;210&gt; 293

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Arabidopsis sp.

&lt;400&gt; 293

Val Thr Lys Ile Tyr Gly Phe Val Cys Ser  
 1 5 10

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                   20                  25                  30  
 Gly Arg Val Val Glu Asn Leu Glu Arg Leu Val Leu Leu Lys Gly Leu  
                   35                  40                  45  
 Arg Lys Pro Val Gln Leu Val Ser Phe  
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 Ser Glu Glu Lys Gln Gln Phe Lys Gln Ser Phe Phe Tyr Val Met Val  
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 Tyr Gln Leu Ile Met  
                   20

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                   20                  25                  30  
 Leu Phe Val Phe Gln Phe Lys Asn Asn Val Tyr Val Val Ser Leu His  
                   35                  40                  45  
 Arg Pro Leu Glu Lys Lys Ser Phe Ala Gln Leu Tyr Ile Tyr Leu Val  
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 Phe Ile  
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Tyr His

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 Val Leu Ala Arg Leu Val Leu Lys Arg Phe Ser Arg Phe Asn Phe Val  
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Val Tyr

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Phe Tyr Phe Asn Val Asn Met Tyr Leu Met His Leu Thr Phe Ser Ile  
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Thr Asn Lys Asn Lys Lys Lys Glu Lys Ser Ser Leu Lys Ser Glu Ser  
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Asn Tyr Phe Gln Lys Ile  
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Ile Ile Asn Leu Asn Val Trp Asn Arg Glu Arg Leu Leu Leu Asn Ile  
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Asn Ala Lys Tyr Thr  
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## SEQUENCE LISTING

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Sub #4

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cDNA sequence of *FIE1*.

SEQ ID NO:2

Amino acid sequence of *FIE1*.

SEQ ID NO:3

cDNA sequence of *FIE3*.

SEQ ID NO:4

Amino acid sequence *FIE3*.

SEQ ID NO:5

Genomic sequence of *FIE3*.

SEQ ID NO:6

Genomic sequence of *FIE1*.

Seq. ID No: 2

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SEQ ID NO:3

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1





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1e3)ond5's/n.seq(1>5801) ->	4430	4440	4450	4460	4470	4480	4490	4500	4510	4520	4530	4540
1e3)ond5's/n.seq(1>5801) ->	4550	4560	4570	4580	4590	4600	4610	4620	4630	4640	4650	4660
1e3)ond5's/n.seq(1>5801) ->	4670	4680	4690	4700	4710	4720	4730	4740	4750	4760	4770	4780
1e3)ond5's/n.seq(1>5801) ->	4790	4800	4810	4820	4830	4840	4850	4860	4870	4880	4890	4900
1e3)ond5's/n.seq(1>5801) ->	4910	4920	4930	4940	4950	4960	4970	4980	4990	5000	5010	5020
1e3)ond5's/n.seq(1>5801) ->	5030	5040	5050	5060	5070	5080	5090	5100	5110	5120	5130	5140
1e3)ond5's/n.seq(1>5801) ->	5150	5160	5170	5180	5190	5200	5210	5220	5230	5240	5250	5260
1e3)ond5's/n.seq(1>5801) ->	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380
1e3)ond5's/n.seq(1>5801) ->	5390	5400	5410	5420	5430	5440	5450	5460	5470	5480	5490	5500
1e3)ond5's/n.seq(1>5801) ->	5510	5520	5530	5540	5550	5560	5570	5580	5590	5600	5610	5620
1e3)ond5's/n.seq(1>5801) ->	5630	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730	5740
1e3)ond5's/n.seq(1>5801) ->	5750	5760	5770	5780	5790	5800	5810	5820	5830	5840	5850	5860
1e3)ond5's/n.seq(1>5801) ->	5870	5880	5890	5900	5910	5920	5930	5940	5950	5960	5970	5980
1e3)ond5's/n.seq(1>5801) ->	5990	6000	6010	6020	6030	6040	6050	6060	6070	6080	6090	6100
1e3)ond5's/n.seq(1>5801) ->	6110	6120	6130	6140	6150	6160	6170	6180	6190	6200	6210	6220
1e3)ond5's/n.seq(1>5801) ->	6230	6240	6250	6260	6270	6280	6290	6300	6310	6320	6330	6340
1e3)ond5's/n.seq(1>5801) ->	6350	6360	6370	6380	6390	6400	6410	6420	6430	6440	6450	6460
1e3)ond5's/n.seq(1>5801) ->	6470	6480	6490	6500	6510	6520	6530	6540	6550	6560	6570	6580
1e3)ond5's/n.seq(1>5801) ->	6590	6600	6610	6620	6630	6640	6650	6660	6670	6680	6690	6700
1e3)ond5's/n.seq(1>5801) ->	6710	6720	6730	6740	6750	6760	6770	6780	6790	6800	6810	6820
1e3)ond5's/n.seq(1>5801) ->	6830	6840	6850	6860	6870	6880	6890	6900	6910	6920	6930	6940
1e3)ond5's/n.seq(1>5801) ->	6950	6960	6970	6980	6990	7000	7010	7020	7030	7040	7050	7060
1e3)ond5's/n.seq(1>5801) ->	7070	7080	7090	7100	7110	7120	7130	7140	7150	7160	7170	7180
1e3)ond5's/n.seq(1>5801) ->	7190	7200	7210	7220	7230	7240	7250	7260	7270	7280	7290	7300
1e3)ond5's/n.seq(1>5801) ->	7310	7320	7330	7340	7350	7360						

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5796 5850

Tel code : c/n seq11>5801 ->  
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[illegible]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524
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